Problem Statement-2

```java
package datastructures;
import java.util.Arrays;
public class ExpSearch {
public static  void main(String[] args){
    int[] arr = {6,12,18,24,32};
    int length= arr.length;
    int value = 18;
    int outcome = exponentialSearch(arr,length,value);
    if(outcome<0){
        System.out.println( "Element is not present in the array");
    }else {
        System.out.println( "Element is  present in the array at index
:"+outcome);
    }
        }
        public static int exponentialSearch(int[] arr ,int length, int value ){
        if(arr[0]==value){
            return 0;
            }
        int i=1;
        while(i<length && arr[i]<=value){
            i=i*2;
        }
        return Arrays.binarySearch(arr,i/2,Math.min(i,length),value);
        }
}
```

```java
1  package datastructures;
2
3  import java.util.Arrays;
4
5  public class ExpSearch {
6
7  public static  void main(String[] args){
8
9      int[] arr = {6,12,18,24,32};
10     int length= arr.length;
11     int value = 18;
12     int outcome = exponentialSearch(arr,length,value);
13
14     if(outcome<0){
15
16         System.out.println( "Element is not present in the array");
17
18     }else {
19
20         System.out.println( "Element is  present in the array at index :"+outcome);
21  }
22
23     }
24
25     public static int exponentialSearch(int[] arr ,int length, int value ){
26
27        if(arr[0]==value){
```

<terminated> ExpSearch [Java Application] C:\Users\Swaroop\.p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_17.0.7.v20230425-1502\jre\bin

Element is present in the array at index :2